

Figure 1: Example transmission of data over a communications network

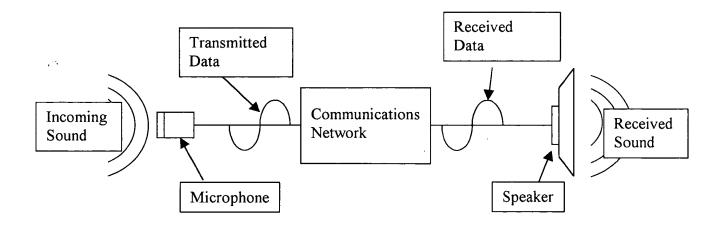


Figure 2: Creation of a digital signal from an analog signal

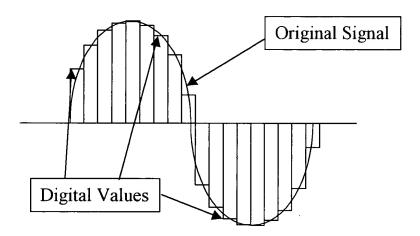




Figure 3: Illustration of the difference between bits, packets and frames.

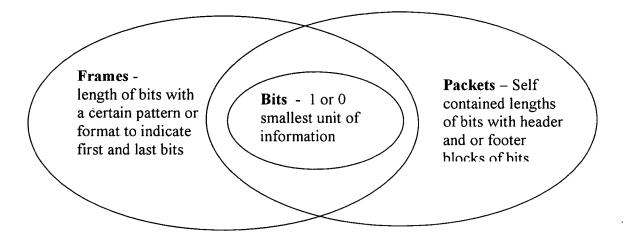


Figure 4: Illustration of the data displayed in each node of the Tree View of a data communications network.

## •Name and type of network device

- -Specifications
  - •Electrical, Optical, and Electromagnetic specific operating parameters
  - •Software, Firmware and Hardware version numbers and settings
- -Physical connectors
  - •Specifications and setting specific to each connector



Figure 5: Method for creating a 3-D site specific model of the environment

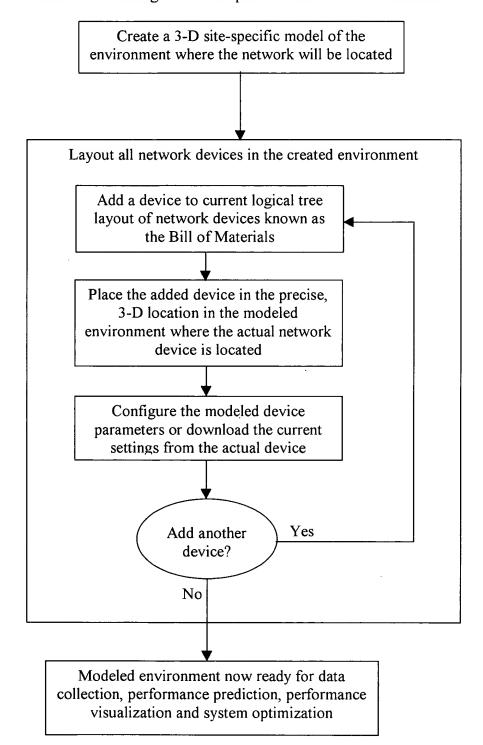




Figure 6: Method for optimizing a data communications network using predictions

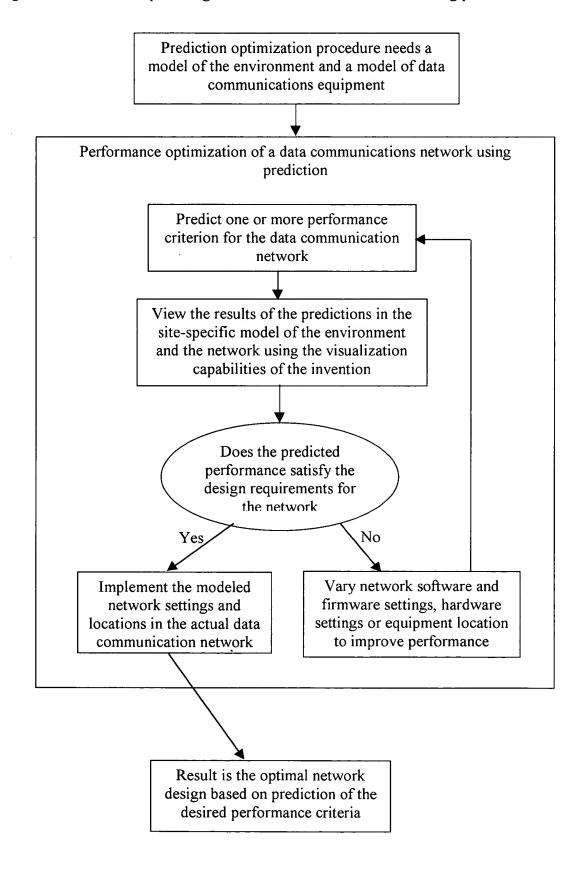
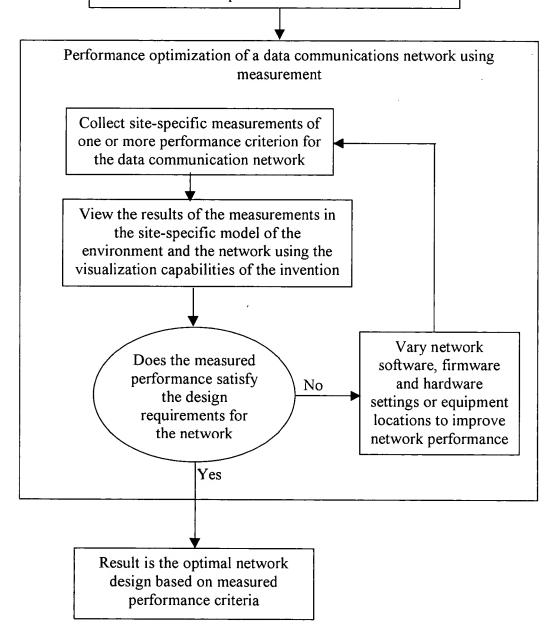




Figure 7: Method for optimizing a data communications network using measurements

Measurement optimization procedure needs a model of the environment and the data communications equipment and site-specific measurements of one or more performance criteria



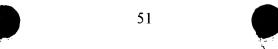


Figure8: Method for optimizing a data communications network using predictions and measurements.

